Chapter 1. Project Description

Background

The purpose of the Meadow Vista Vegetation Management Project is to reduce wildland fire hazards by implementing shaded fuelbreaks, defensible space, and defensible landscape practices in keeping with objectives of the Meadow Vista Community Plan utilizing the Program Timberland Environmental Impact Report (PTEIR) process.

The unincorporated community of Meadow Vista is located in Placer County about seven miles northeast of the City of Auburn. In 1996, the Placer County Board of Supervisors adopted the Meadow Vista Community Plan; although its principal function is to guide new development by way of goals, policies, and implementation measures, the plan also establishes a policy framework for reducing the hazards of wildland fire through fuel reduction measures. Prominent policy direction is a desire to perpetuate the existing forested condition while recognizing that the area has significant fire dangers that must be addressed.

The California Department of Forestry and Fire Protection (CDF) regulates commercial timber harvesting on private lands in California. Commercial timber harvesting is defined as the cutting of commercial species of trees for the purposes of sale or barter for service or goods. CDF also has fire suppression responsibility on private lands and depends on voluntary cooperation of private landowners to implement local fuel reduction measures. (For areas immediately around structures, state law - Public Resources Code 4291 - requires mandatory fuels management). Placer County and CDF will rely primarily on individual private property owners to implement fuel reduction measures. Such measures will include, but not be limited to, brush and grass removal, limb trimming, canopy thinning, and mature tree removal. If the homeowner is selling or bartering trees as a timber "product", such harvesting falls under the State Forest Practice Regulations and may fall within the purview of the PTHP and the PTEIR process, should the landowner so choose. Otherwise, property owners are subject to the standard timber harvest plan process (THP).

The Program Timber Harvest Plan and the Program Timberland EIR

Timber harvesting plans (THPs) for proposed timber operations must be prepared, evaluated, and approved as specified in the Z'berg-Nejedly Forest Practice Act of 1973 (Forest Practice Act) and the California Forest Practice Rules. This process

has been certified as functionally equivalent to the EIR process under CEQA (CEQA Guidelines Sec. 15251).

"Functional equivalence" implies that timber harvesting is exempt from CEQA requirements to prepare EIRs and negative declarations because an equivalent, alternative process for environmental assessment has been established.

Program EIRs are prepared for a series of closely related actions such as phased or long-term projects. The environmental impacts of the timber operations that constitute the proposed project are expected to be similar over an extended period and a wide range of locations.

The California Board of Forestry (BOF) has adopted a new type of THP (the program timber harvest plan, or PTHP) to be used in conjunction with a certified Program Timberland EIR (PTEIR). Operations proposed in a PTHP will be reviewed to determine whether they are consistent with the project described in the PTEIR or could result in significant environmental impacts not covered in the PTEIR.

Although devised to simplify timber harvesting on large parcels under single ownership, the Meadow Vista PTEIR provides most of the informational requirements of the THP system in an "umbrella" document covering multiple ownerships in the Meadow Vista plan area. Shaded fuelbreaks, defensible space around houses, and defensible landscape type harvests with commercial harvesting can be undertaken in conformance with the PTEIR mitigation measures to reduce potential adverse impacts to the environment. The PTEIR process is intended to reduce additional paperwork, costs, and processing time to individual landowners who choose to participate in the process, while maintaining a high level of environmental protection.

When a Program EIR has been certified, applicants typically achieve CEQA compliance for subsequent projects by preparing either a project-level EIR or Negative Declaration. Under the PTEIR approach, owners of timberland for which a PTEIR has been certified would prepare a project level PTHP pursuant to requirements of the Forest Practice Act. This would occur when a timberland owner wishes to undertake a vegetation management project that involves some amount of commercial timber harvesting, and proposes to do the project within the requirements of the approved PTEIR. The Forest Practice Act and Forest Practice Rules contain prescriptive operational standards to which timber operations generally must adhere, including standards for reforestation and protection of soil productivity, water quality, and wildlife habitat. The Rules also allow alternative practices if they provide resource protection at least equal to standard Rules.

A PTHP must be prepared for each individual project by a Registered Professional Forester, but the information required should be significantly less than with a standard Timber Harvesting Plan. The rules for the PTHP (Title 14, Section 1092 of the Public Resources Code) lay out its content requirements and conclude, "Where the PTEIR has adequately addressed an environmental impact, the PTHP need only include reference to the PTEIR provisions." The implementation mechanism is a checklist to be developed in each PTEIR to address site specific impacts. The checklist indicates mitigation measures to be applied in all areas of resource protection addressed in the PTEIR for individual and cumulative effects, and to show that the operations proposed in the PTHP are consistent with the types of projects analyzed within the approved PTEIR.

The PTEIR remains effective as long as there is no significant change in resource conditions. The subsequent PTHP should be limited to that area on which timber operations normally will be completed in one 12-month period, but in no case will it extend beyond 36 months. The PTHP and associated checklist become the primary mechanism for determining the continued adequacy of the PTEIR.

If the proposed timber operations are found to be inconsistent with the project as described in the PTEIR or could result in significant new environmental impacts, one of the following three options will be adopted:

- the proposed operations will be modified to be consistent with the project described in the PTEIR,
- a supplemental CEQA document will be prepared, or
- a conventional THP will be prepared.

Project Location and Characteristics

The Meadow Vista Community Plan establishes the policy framework for retaining a predominantly rural lifestyle while maintaining a holding capacity of 2,988 dwelling units and a population of 7,471. The current population is approximately 5,000. The plan area is approximately 6,980 acres bounded by the Bear River to the northwest, the Naturewood subdivision to the north, the Meadow Gate Road area to the east, and Christian Valley to the south.

The area is typified by rolling hills and meadows, as well as pine and oak woodlands. Riparian habitat is located along Orr and Wooley Creeks and along a number of intermittent streams. A large portion of the plan area drains to Combie Lake on the Bear River.

The area's elevation ranges from 1,650 feet to 2,050 feet. Land uses are predominantly open space and rural residential with scattered mining, agricultural, and commercial uses. The plan area is close to I-80 and provides an attractive residential community for commuters to Auburn, south Placer County, and the Sacramento region. Figures 1-1 and 1-2 show the regional and specific location of Meadow Vista.

Fire suppression practices combined with a lack of vegetation management have allowed a fuel bed of leaves, pine needles, down woody material, dead trees, limbs, and brush to build up adding to the chance of fires spreading more rapidly, including spread from burning embers. Due to lack of fire, the forest now consists of an ever growing thick brush-oak-pine fuel type that has far greater amounts of fuel than were available to pre-settlement or historic wildfire. An increased risk of fire ignition has developed over the past 50 years due to the introduction of rural-urban zoning regulations that permit one and two-acre parcels in this highly flammable and hazardous fuel area. With increased numbers of people come increased sources of fire ignition .

CDF has updated its statewide *Fire Plan*; in turn, local Ranger Units within CDF will update their own fire plans. As part of the Nevada Yuba Placer Ranger Unit Pre-Fire Management Plan, a system of shaded fuelbreaks along existing roads has been designed to decrease potential fire danger in the Meadow Vista community. The fire plan identifies the need to manage vegetation to help achieve a variety of goals that include area fire protection, defensible space around residences, and healthy forests that can be perpetuated into the future.

Managing existing vegetation could involve to some degree the commercial harvesting of trees, whether to remove dead or dying trees, trees posing a hazard for fire protection, or those suffering from insect/disease problems. Private landowners may be able to harvest trees with commercial value to generate revenue for proper forest fuels management and other purposes.

In addition to addressing environmental effects of fuel load reduction provisions of the Meadow Vista Community Plan and the Nevada Yuba Placer Pre-Fire Management Plan, this document includes analysis of the potential impacts of the fuel management projects that are a part of the "Proposition 204 Coordinated American River Watershed Health Improvement and Monitoring Project," within the Meadow Vista community plan area. The State Water Resources Control Board has awarded $1,000,000 to the American River Watershed Group under the Safe, Clean, Reliable

Meadow Vista Vegetation Management Project
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Figure 1-1: Regional Location

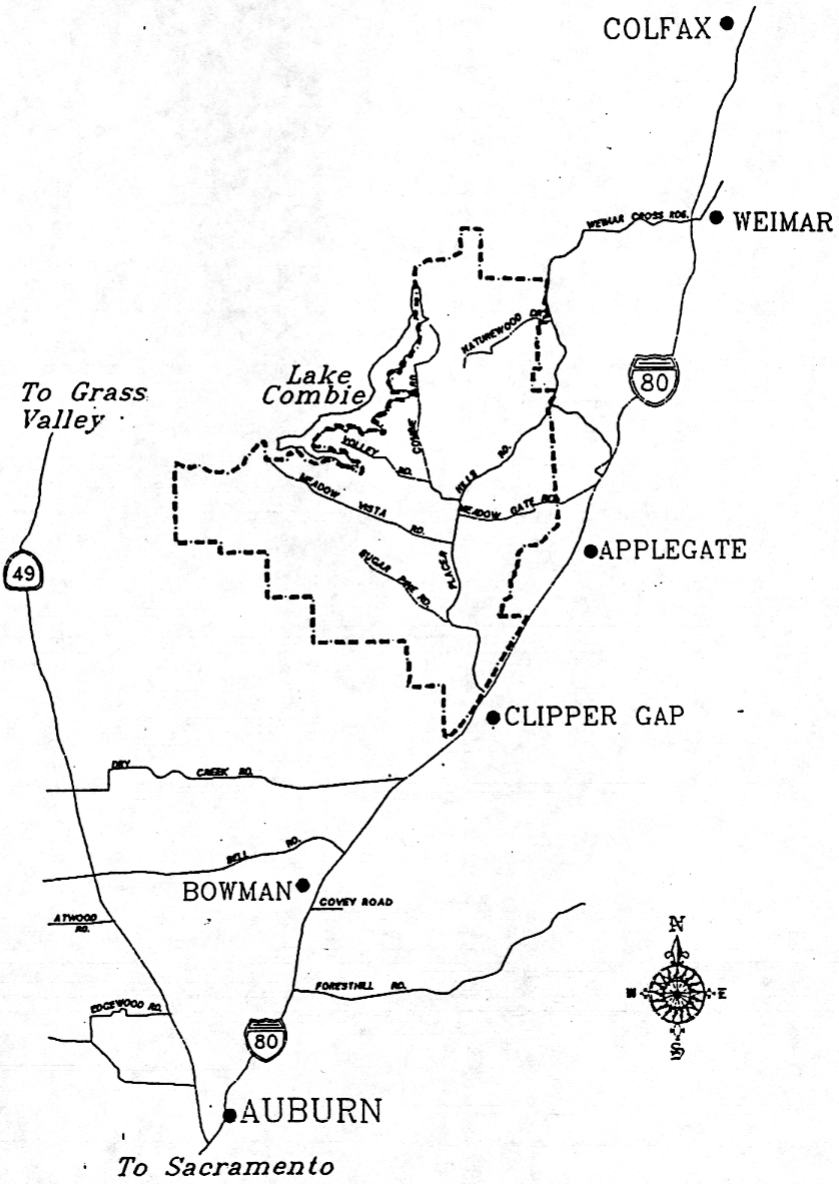

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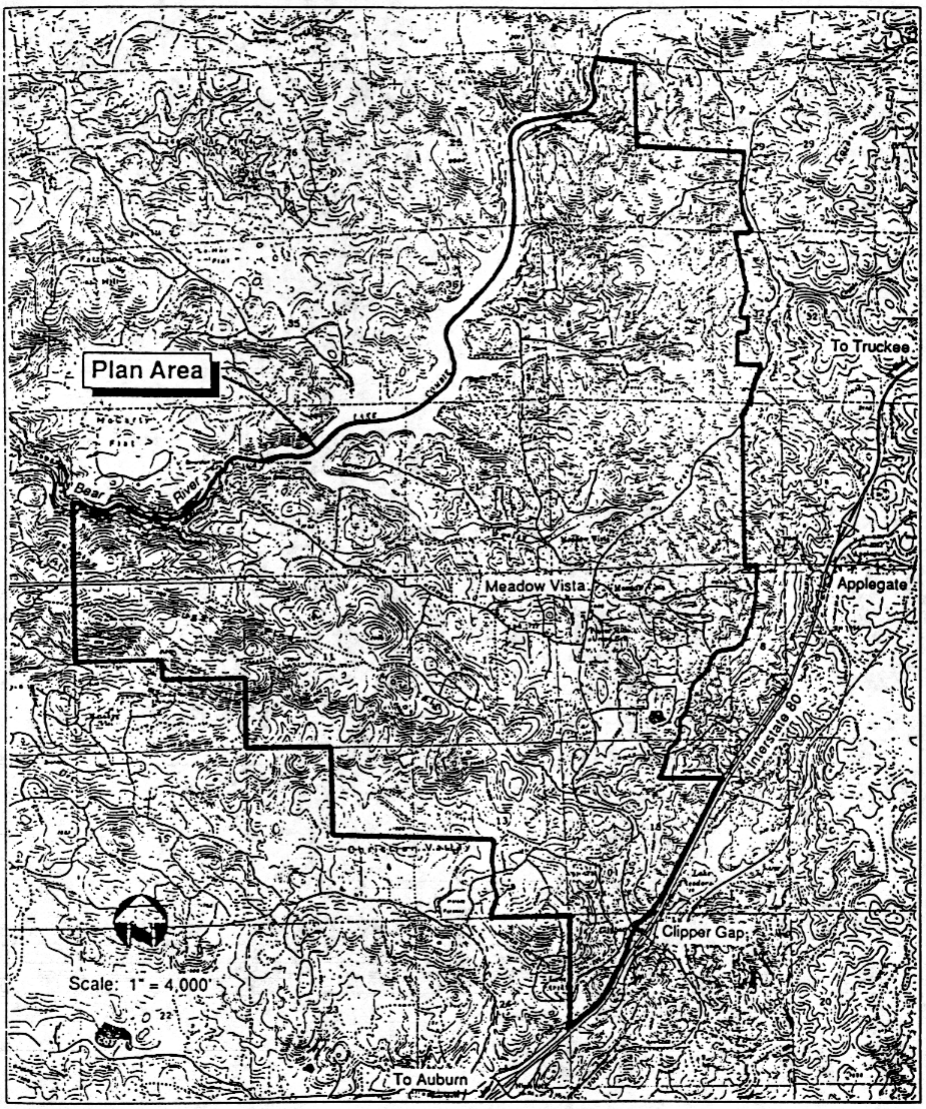
Figure 1-2: Specific Location



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Water Supply Act (Proposition 204) and the Delta Tributary Watershed Program (Delta Program). The funds, matched by $1,731,000 in personnel and services by participating agencies, are to be used over a three-year period for specific projects within the American River Watershed in Placer County.

The emphasis of the Proposition 204 projects will be reducing fuel loading from the watershed; improving water quality by reducing the potential for large damaging fires; restoring the watershed to healthier conditions to improve both water yield and water quality; developing cooperation among all stakeholders in the watershed; and encouraging voluntary cooperation of landowners to participate in the effort. The project includes a monitoring program so that effects on wildlife, fuel loading, and water and soil quality can be tracked and used to guide future activities. The Proposition 204 project will be carried out in several areas within the American River Watershed including Foresthill, Meadow Vista/Applegate, Sugar Pine, and Rim-Hell Hole. A portion of this area includes the Meadow Vista community plan area.

Environmental effects of the Proposition 204 fuel reduction projects within the Meadow Vista area are discussed in this document and are closely related to those activities which may be carried out under the PTEIR process. The project area for the Meadow Vista portion of the Proposition 204 project is the same as that defined for this PTEIR and discussed later in this section. Prior to any activity within the balance of the American River Watershed under the Proposition 204 project, additional environmental clearance will be required.

Specific fuel reduction objectives of the Proposition 204 project over the three year project period within the Meadow Vista community are:

- construct 9.0 miles of shaded fuel breaks;
- inspect 2,900 existing housing units for defensible space requirements under PRC 4291; and
- reduce fuel loading using defensible space and defensible landscape prescriptions

These projects will be accomplished by a consortium of local, state and federal agencies and local landowners using a combination of harvesting techniques and disposal methods including burning, chipping, and masticating.

The other components of the Proposition 204 program - the Biomass Exchange Project and the Public Education Project - are not addressed in this PTEIR.

The primary fuel reduction programs discussed in the PTEIR, and areas where they will occur, are:

Defensible Space. Defensible space is that area between a house and an on-coming wildfire where vegetation has been modified to reduce wildfire threat and allow firefighters to safely defend the house. Often times, defensible space is a backyard, an adjacent lot, or a community greenbelt. The purpose of defensible space is to reduce the wildfire threat to a home and forest canopy through appropriate modification of vegetation and surface fuels and to be able to save the home, the improvements and the forest habitat. For owners of parcels larger than about four acres, areas beyond the individual home defensible space lie within the defensible landscape zone and defensible space techniques can be practiced to enhance the forest health and protect the Meadow Vista forest habitat.

In 1963, the State enacted Public Resources Code 4291 to establish minimum requirements for vegetative clearance to reduce structural exposure to fire; to give firefighters a reasonable chance of saving structures; and to prevent structural fires from becoming forest fires. PRC 4291 requires a 30-100 foot minimum defensible space around all buildings and is monitored and enforced by CDF. In Meadow Vista, the Placer Hills Fire Protection District has enacted two ordinances to meet PRC 4291 at the onset of new construction by requiring 30 feet or better of vegetation management, depending on the building site, and removal of slash at the time the foundation is completed.

For the purpose of this PTEIR, defensible space is considered to extend to up to 200 feet from an approved and legally permitted structure that complies with the California Building Code. However, this maximum distance is to be limited to a lesser distance where application of defensible space treatments to that lesser distance will provide an adequate level of defensible space protection to the structure. Factors such as slope, fuel or vegetation types, and structure configuration and materials are important determinants of the needed defensible space clearance.

Shaded Fuelbreaks. A fuels management strategy that protects human life, communities, and resources includes the establishment of "shaded fuelbreaks" at key locations. Shaded fuelbreaks involve the selective removal of brush and trees to open up the canopy and remove fuel on the forest floor along roadways and ridge lines, generally for a distance of 50-300 feet from the centerline. They will help reduce or halt the spread of wildland fires, thus reducing damage to forested watershed ecosystems and the people and structures found within these ecosystems.

Tree spacing in fuel break areas must allow for effective penetration to ground level of aerial dropping of fire retardant. In contrast to historical fuelbreaks that removed all vegetation, shaded fuelbreaks will only remove a portion of the existing vegetation.

Fuel loading data obtained through the use of the Geographical Information System (GIS) system by the Natural Resources Conservation Service (NRCS) has helped the Placer Hills Fire Protection District propose a basic community wide fire defense fuelbreak system and prioritize fuel reduction treatment areas. Figure 1-3 illustrates the general areas in Meadow Vista where Extreme Fuel Loading is found. Figure 1-4 shows proposed shaded fuelbreaks illustrating which road-side shaded fuelbreaks are critical in breaking up fuel continuity throughout the community. These road corridors will provide ingress for fire apparatus and safer egress of citizens during evacuation from large wildland fires.

The Winchester planned development, approved within the Meadow Vista area in 1996, contains a system of shaded fuel breaks where the project abuts local roads. These fuelbreaks were approved by CDF and Placer County and include Sugar Pine Road and Placer Hills Road. Within these areas, vegetation will be managed and thinned in a fashion similar to projects undertaken pursuant to the PTEIR. The Winchester fuelbreaks, while part of the community fuelbreak system identified in the fire plan for the Meadow Vista community, are the responsibility of the Winchester developer and the specific potential impacts of the fuelbreak system have been discussed in the Final EIR prepared for the Winchester project. Individual projects within the Winchester development can fall under this PTEIR and the PTHP process.

Defensible Landscape. These landscapes, mostly forested, are the remaining areas of Meadow Vista that do not fall within defensible space or shaded fuelbreak areas. They are generally located away from human habitation or areas with significant human use and do not require intense fuel treatments due to their distance from the more intensely used defensible space and shaded fuelbreak areas. Such landscapes can benefit, however, from maintaining vegetation in a healthy condition and breaking up the continuity of heavy fuel load areas. In many areas, trees occur in dense, overcrowded stands where canopies are touching or even interwoven. Not only are these stands at times unhealthy, they also represent a potentially high fire danger due to their horizontal and vertical continuity that could lead to uncontrollable crown fires. In these cases, poorer quality trees need to be thinned out and remaining vegetation better spaced. Depending on the situation, limbing of lower branches may disrupt fuel continuity if tree spacing is otherwise adequate, or patches of brush may be removed if they pose as significant fuel hazard.

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Figure 1-3: Vegetative Fuel Loading

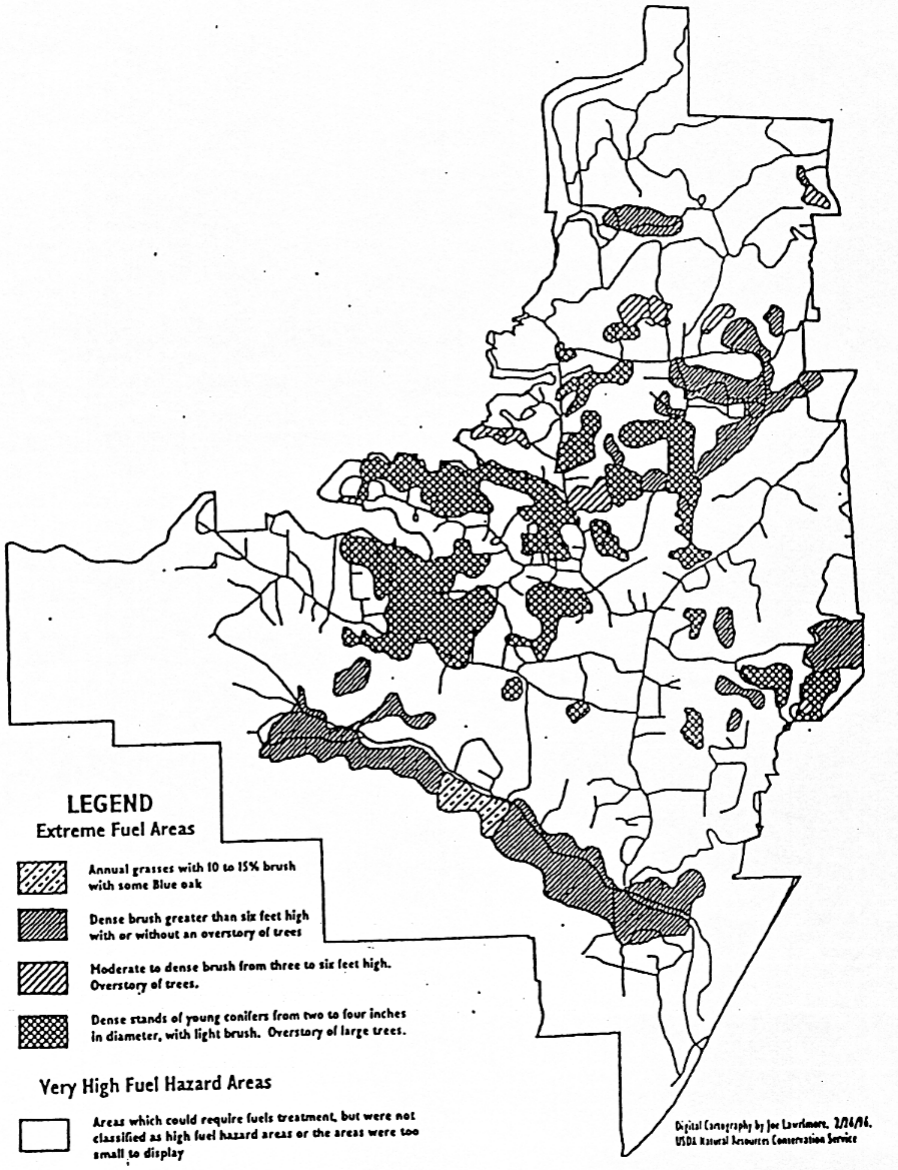

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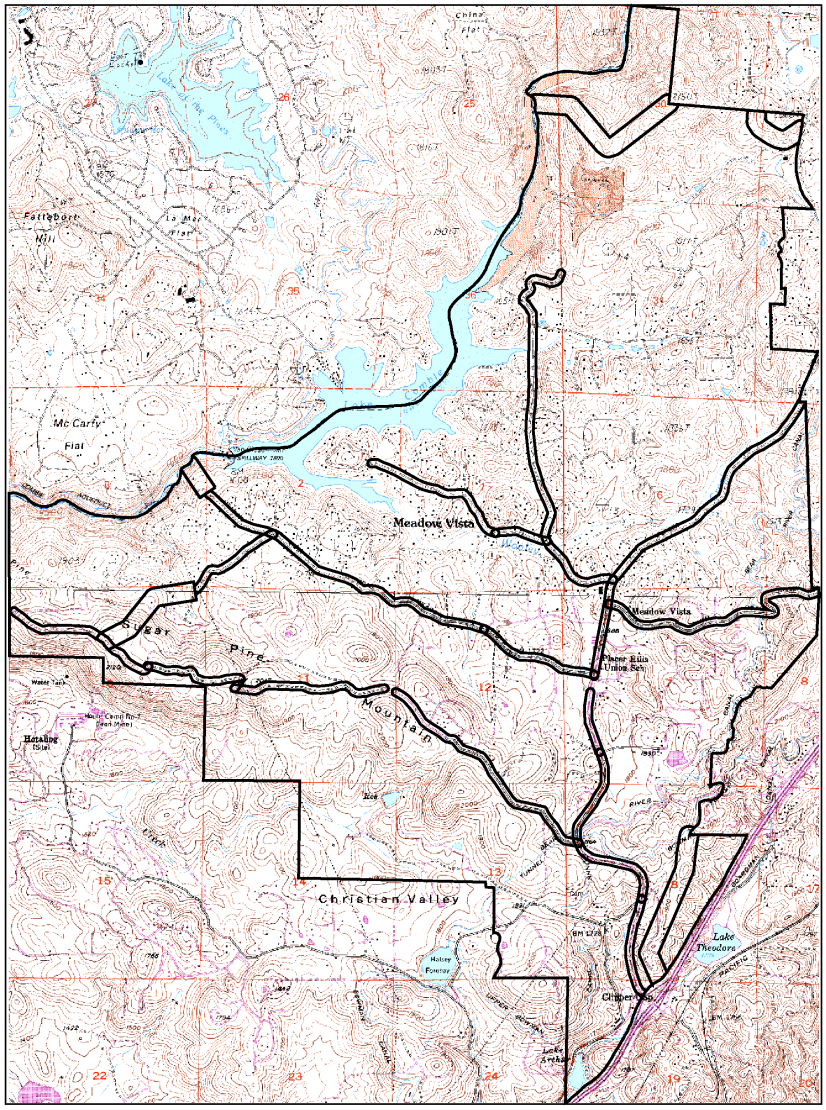
Figure 1-4: Shaded Fuel Breaks



Planning Boundary

Fuel Breaks

0.5 0 0.5 Miles

Scale 1" = 2,500'

Source: Fire and Resource Assessment Program of the California Department of Forestry and Fire Protection

No matter the prescription used, resulting debris will need to be treated if it poses an unacceptable fire risk. Treatment of debris may include lopping light slash down to ground level to stabilize soil or prevent erosion; spreading out debris concentrations over a larger ground area; leaving debris in place to stabilize soil; chipping debris and blowing it back in place; debris removal; or piling and burning concentrations of slash or brush (burning to be a last resort).

Definitions of Silvicultural Systems

California State Board of Forestry regulations describe timber harvest systems based on the type of stand of trees and set minimum tree re-stocking standards that must be met after harvesting is completed (14 California Code of Regulations, 933 *et seq.*). In general, the harvesting systems are:

1. *Clearcutting*

   All trees are removed and the area is prepared and replanted immediately with tree seedlings.

2. *Shelterwood Harvest Systems*

   Shelterwood Preparatory Step: 40-60% of the mature trees are removed to prepare for reproduction of the next generation of trees.

   Shelterwood Seed Step: 4-8 mature healthy trees per acre are left standing as natural seed trees to establish the next generation of trees. Usually occurs more than five years after a Shelterwood, Preparatory Step harvest.

   Shelterwood Removal Step: After the next generation of trees is established, the remaining overstory of mature trees is removed to allow full sunlight and spacing to new trees.

3. *Seed Tree Harvest Systems*

   Seed Tree Seed Step: 4-8 mature healthy trees per acre are left standing as natural seed trees to establish the next generation of trees.

   Seed Tree Removal Step: After the next generation of trees is established, the remaining overstory of mature trees is removed to allow full sunlight and spacing to new trees.

4. *Selection Harvest Systems*

Selection: 20% to 40% of existing trees are removed. Harvested trees are of variable size but spacing is more open to allow for future growth.

Group Selection: Small openings are created by harvesting all trees such that the area is large enough for tree species requiring complete sunlight to reproduce. The opening can be up to 2.5 acres in size, but can cover no more than 20% of the selectively harvested area.

Transition: A stand of fairly uniform trees is partially harvested (30-50%) to develop small openings that will result in a stand of trees with a diversity of size and age. Usually, this harvest must be done several times to achieve long-term goals.

5. *Commercial Thinning*

Young trees in dense stands competing for space and sunlight are harvested; 20% to 70% of the trees may be thinned to allow remaining trees enough growing space and sunlight to reach maturity.

6. *Sanitation/Salvage Harvests*

Only those trees that are dead, dying, or that have severe structural problems are removed.

7. *Special Treatment Area Harvests*

Harvests near wild and scenic rivers; national, state, regional, county, or municipal parks; scenic highways; and critical habitats may not significantly impact the resources for which the area was designated. Generally, some form of Selection Harvest is required.

8. *Rehabilitation Harvests*

In areas were numbers of trees do not meet minimum levels required before harvesting is usually considered, harvesting may be allowed if the area is immediately replanted with at least 10 new seedlings for each tree removed.

9. *Fuelbreak/Defensible Space Harvest*

   Harvesting of trees where the objective is to space-out the remaining vegetation for better fire prevention purposes. This harvest system is not intended for tree regeneration, or to improve the growth of existing trees, but rather is strictly for fire protection purposes.

10. *Alternative Prescription*

    When a stand of trees does not meet the definition of any standard forest harvesting system due to the types and distribution of trees present, harvests can still occur but must be closely related to an applicable silvicultural system and meet minimum post-harvest stocking standards of that system.

The following silvicultural systems only are to be used in the Meadow Vista Vegetation Management Project for purposes of the PTEIR. All other harvest methods are prohibited within the PTEIR framework and would require submittal of a Timber Harvest Plan and standard review under the Forest Practice Act.

Shaded Fuelbreaks

1. Fuel Break/Defensible Space harvest

Defensible Space

1. Fuel Break/Defensible Space harvest

2. Sanitation/Salvage

Defensible Landscapes

1. All harvest systems except clearcutting. When using other evenaged management prescriptions, there must remain at least eight 18" DBH or larger countable trees per acre.

2. Seed Tree Seed Step or similar alternative prescriptions are permissible. At least twice the number of minimum leave trees specified in the Forest Practice Rules must be retained.

Tonnage Estimates In the Meadow Vista Community

It is estimated by the CDF Fire and Resource Assessment Program that up to 50 dry tons of total available vegetation fuels exist on average per acre in the Meadow Vista community. In a catastrophic fire involving the entire Meadow Vista area, it is estimated by CDF that up to 349,000 tons of vegetation would burn and up to 1/3 of all houses in the community could be lost, or 640 houses.

If all parcels within the plan area receive the vegetation management treatments outlined in the PTEIR, approximately 136,250 dry tons (20 tons per acre) of fuel will be treated. Treatment could be by chipping/masticating, removal, or in limited cases, burning. This figure was calculated by using the California Wildlife Habitat Relations (CWHR) vegetation type acreages to achieve the defensible goals. Shaded fuelbreaks areas had 15 dry tons/acre of vegetation treated, while defensible space areas had 21 tons/acre and defensible landscape areas had 19 tons per acre.

If all potential projects are completed, a residual of 30 dry tons of vegetation per acre will remain. Of this amount, 10 tons would remain on the ground while 20 tons is in the upper boles and limbs of trees. These upper reaches of vegetation would remain safe from wildfire as ladder fuels would be eliminated and spacing increased to prevent flames from reaching them.

Long-term maintenance will require that an additional two tons/acre of organic fuel be treated every 3-6 years. Treatment would be chipping or removal.

Burning Restrictions as Part of the PTEIR/PTHP Process

The Meadow Vista Vegetation Management Project contains an important provision which will significantly reduce air emissions and the nuisance effects of smoke. Burning of slash and harvested debris will be strictly controlled when undertaken within the PTEIR process. Burning will be allowed only if other methods of disposal are unavailable or prove infeasible, or when denial of burning would pose a risk of imminent and substantial economic loss. Limited burning which does take place would be in compliance with burn regulations established by the Placer County APCD, and under permit from CDF, if applicable. This decision has been made due to identification of smoke and associated air quality effects as a leading environmental concern in the Meadow Vista Community. As a result, disposal of waste under a PTHP will be encouraged to coordinate with an appropriate chipping program.

Other disposal alternatives include mastication and re-spreading on the site, and disposal at the Western Regional Sanitary Landfill Multiple Resource Facility (MRF). The MRF operates a greenwaste program to create compost. A third alternative may evolve as the Proposition 204 biomass program identifies opportunities for biomass use of greenwaste.

A chipper program is operated by the Placer County Fire Department and coordinated by CDF from its station in Auburn. While Proposition 204 projects are eligible for this chipper program, areas commercially harvested under the State's Forest Practice Rules are not. The priorities of the chipper program are:

- the shaded fuel break construction program
- the PRC 4291 inspection program (defensible space)
- community, associations, neighborhood support
- individual properties as time and scheduling allow

Under this chipper program, all chipping will occur along the road frontage only, allowing the crew to work from the public right-of-way. All material to be chipped must be place along the edge of public/private property. All material will be blown back onto the property to provide cover and erosion protection.

Coordination with the chipper program will be by the property owner. Private contractors or other public agencies may also have chippers that could be used in the PTEIR process.

Chemical Treatment

Use of pesticides, herbicides, and fertilizers are not proposed as part of the PTEIR process and the potential environmental effects of their use is not analyzed.

Intended Uses of the PTEIR

The objectives of this PTEIR are to analyze and disclose to decision makers and the public the environmental effects of implementing the proposed project; to demonstrate to the public that the proposed project will protect the environment; to identify mitigation measures that will reduce or avoid significant environmental impacts that could result from project implementation; and to evaluate a reasonable range of alternatives to the proposed project.

The Meadow Vista Community Plan Final EIR was certified as adequate with adoption of the Plan. That document discusses impacts related to wildland fire suppression and proposes adoption of policies contained in the Plan to reduce these impacts. This PTEIR is tiered to the Meadow Vista EIR which is incorporated by reference. The PTEIR is a Subsequent EIR in this instance, using information in the Meadow Vista EIR as a basis for analysis. A subsequent EIR is defined in Guidelines Sec. 15162 and is prepared when substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant effects. Mitigation measures in this document are based on current Forest Practice Rules and new measures developed specifically for the Meadow Vista area.

The PTEIR will be used by CDF to review proposed individual program timber harvest plans undertaken in conformance with the mitigation measures in the PTEIR. The PTEIR contains a checklist to measure the consistency of individual projects with the overall program; this checklist will be used by CDF personnel as they evaluate these individual projects. The checklist is attached as Appendix A. The monitoring program is an important component of the PTEIR process. It ensures that the Forest Practice Rules and mitigation measures contained in the PTEIR are in fact carried out in the subsequent PTHP on individual projects.

Impacts covered in the PTEIR include:

Land use and Planning
Geology and Soils
Hydrology and Water Quality
Visual Resources
Biological Resources
Cultural Resources
Noise
Air Quality
Traffic
Fire Protection

Known Areas of Controversy

CEQA Guidelines (Section 15123) require an EIR to identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Several areas of controversy related to implementation of the vegetation management project were raised in the Initial Study (Appendix B), the Notice of Preparation (NOP) for the EIR (Appendix C), and a scoping meeting held in Meadow Vista. These issues include

potential impacts to wildlife, air quality (smoke), and aesthetics.